

**AMENDMENTS TO THE CLAIMS**

This listing of the claims replaces all prior listings and versions:

**1 to 65.** (canceled).

**66.** (currently amended): ~~A polynucleotide, wherein the polynucleotide is a member of~~  
a A library comprising a plurality of polynucleotides, the members of each polynucleotide of the  
library comprising a vector and an insert, wherein each of the insert sequences consist essentially  
of accessible regions of cellular chromatin, wherein the library is obtained according to the  
method of:

- (a) contacting cellular chromatin with a probe, wherein reaction of the probe with cellular chromatin results in polynucleotide cleavage at accessible regions of cellular chromatin;
- (b) deproteinizing the cleaved chromatin of step (a);
- (c) digesting the deproteinized chromatin of step (b) with a nuclease to generate a collection of polynucleotide fragments; and
- (d) selectively cloning polynucleotide fragments comprising one end generated by probe cleavage.

**67.** (currently amended): A library ~~comprising a plurality of polynucleotides~~ according to claim 66, wherein each insert sequence consists of an accessible region of cellular chromatin.

**68.** (currently amended): The library of claim ~~66~~ 67, wherein the cellular chromatin is obtained from cells at a particular stage of development.

**69.** (currently amended): The library of claim ~~66~~ 67, wherein the cellular chromatin is obtained from cells of a particular tissue.

**70.** (currently amended): The library of claim ~~66~~ 67, wherein the cellular chromatin is obtained from diseased cells.

**71.** (currently amended): The library of claim 66 ~~67~~, wherein the cellular chromatin is obtained from infected cells.

**72 to 124.** (canceled).

**125.** (previously presented): The polynucleotide of claim 66, wherein, in step (a), the probe is a nuclease.

**126.** (previously presented): The polynucleotide of claim 125, wherein the nuclease is a restriction enzyme.

**127.** (previously presented): The polynucleotide of claim 126, wherein the probe comprises a plurality of restriction enzymes.

**128.** (previously presented): The polynucleotide of claim 66, wherein, in step (c), the nuclease is a restriction enzyme.